

Appln No. 10/723,349
Amdt date January 4, 2006
Reply to Office action of October 4, 2005

Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1. (Currently Amended) A substrate for circuit wiring, ~~in which an electronic component is mounted by soldering to a wiring pattern formed on an insulated layer deposited over a metallic substrate, wherein~~ comprising:

~~a mounted portion of said electronic component is resin molded with a resin material having a coefficient of linear thermal expansion smaller than the coefficient of linear thermal expansion of said insulated layer~~

a metallic substrate;

an insulated layer deposited over said metallic substrate;

at least one electronic component mounted by soldering to a wiring pattern formed on said insulated layer; and

a resin for molding a mounting portion of said electronic component,

wherein said resin has a coefficient of linear thermal expansion smaller than the coefficient of linear thermal expansion of said insulated layer.

2. (Currently Amended) [[A]] The substrate for circuit wiring as claimed in claim 1, wherein said insulated layer is formed from a resin material containing an inorganic filler for increasing heat dissipation and an elastic filler for reducing an elastic modulus.

3. (Cancelled)

4. (Currently Amended) [[A]] The substrate for circuit wiring as claimed in claim [3]] 2, wherein said inorganic filler has electrical insulation properties and high thermal conductivity.

5. (Currently Amended) [[A]] The substrate for circuit wiring as claimed in claim 4, wherein said inorganic filler comprises one or more materials selected from the group consisting of silicon oxide, aluminum oxide, aluminum nitride, silicon nitride, and boron nitride.
6. (Currently Amended) [[A]] The substrate for circuit wiring as claimed in claim 5, wherein said metallic substrate is aluminum based.
7. (Currently Amended) [[A]] The substrate for circuit wiring as claimed in claim [[1 or]] 2, wherein the mounting portion of said electronic component is all-enclosed and molded [[with]] by said resin ~~material~~ with said insulated layer and said metallic substrate in integral fashion.
8. (Currently Amended) [[A]] The substrate for circuit wiring as claimed in claim 7, wherein said inorganic filler has electrical insulation properties and high thermal conductivity.
9. (Currently Amended) [[A]] The substrate for circuit wiring as claimed in claim 8, wherein said inorganic filler comprises one or more materials selected from the group consisting of silicon oxide, aluminum oxide, aluminum nitride, silicon nitride, and boron nitride.
10. (Currently Amended) [[A]] The substrate for circuit wiring as claimed in claim 9, wherein said metallic substrate is aluminum based.
11. (New) The substrate for circuit wiring as claimed in claim 1, wherein said insulated layer comprises an inorganic filler having electrical insulation properties and high thermal conductivity.
12. (New) The substrate for circuit wiring as claimed in claim 1, wherein the mounting portion of said electronic component is all-enclosed and molded by said resin with said insulated layer and said metallic substrate in integral fashion.

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13. (New) The substrate for circuit wiring as claimed in claim 1, wherein said insulated layer exerts a stress on said electronic component when subjected to a high-temperature environment, and wherein said resin molded to the mounting portion of said electronic component alleviates said stress on said electronic component.

14. (New) The substrate for circuit wiring as claimed in claim 1, wherein said resin molded to the mounting portion of said electronic component does not expand when subjected to a high-temperature environment, and wherein said resin molded to the mounting portion of said electronic component undergoes a shrinkage when subjected to an external force.

15. (New) The substrate for circuit wiring as claimed in claim 1, wherein said electronic component is between said insulated layer and said resin molded to the mounting portion of said electronic component, and wherein said insulated layer is between said electronic component and said metallic substrate.